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RIBES AUREUM AND RIBES LENTUM.

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Ribes aureum.

In the year 1814 Frederick Pursh published a description of a yellow-flowered currant from the western United States under the name *Ribes aureum*. This species, or group of species, constitutes a clearly defined type, confined in its natural range to western North America, which has been treated by most botanists as a subgenus of *Ribes* named *Symphocalyx*, and by one author was even made a distinct genus, *Chrysobotrya*. It was introduced into cultivation in Europe early in the nineteenth century, and became a great favorite on account of its golden flowers, with their often deliciously spicy odor, and its handsome amber-colored, wine-colored, or black berries. These cultivated forms have differed considerably and on them have been based several descriptions of supposed new species. Some of these are known only in cultivation, and seem therefore to be merely horticultural varieties and to have no existence in nature either as species or subspecies. There are, however, two forms occurring wild in the United States which are commonly distinguished by botanists. In one of these, abundant in the Columbia River valley of Oregon, Washington, and Idaho, the leaves of vigorous shoots have the margins of the

lobes incurved toward the apex, and obtuse-angled; the racemes are commonly 10 to 15-flowered, and the ordinarily odorless flowers are about 11 mm. in length, from the base of the ovary to the apex of the petals, when dry. In the other plant, which is a native of the Missouri River region, the leaves on vigorous shoots have lobes with straight margins and the apex acute-angled, the racemes have commonly 2 to 8 flowers with the spicy odor of the carnation, and the corresponding measurement in the dried flower is about 16 mm. The facts brought out in the present paper show that the name *Ribes aureum* Pursh must be restricted to the Columbia plant, which ordinarily has passed under the name *Ribes tenuiflorum* Lindl. and that the Missouri plant, which is frequently cultivated in old gardens and which commonly passes under the name *Ribes aureum* must be called *Ribes longiflorum* Nutt.

Turning to the original description of *aureum** we find the following citation of types. "On the banks of the rivers Missouri and Columbia. *M. Lewis* [sign for woody plant] April. *v. s. in Herb. Lewis; v. v. in Hort.*" By referring to Mr. Thomas Meehan's paper on the plants of the Lewis and Clark Expedition,† to Dr. Elliott Coues' notes on Mr. Meehan's paper,‡ and to Dr. Coues' edition of the History of the Lewis and Clark Expedition, four volumes, 1893, it appears that of the two specimens in Lewis' herbarium, now on deposit in the herbarium of the Academy of Sciences, Philadelphia, one was collected on the site of the present town of The Dalles, in Oregon, April 16, 1806, the other on the Missouri River, in Montana, at the junction of the Jefferson, Madison, and Gallatin rivers, July 29, 1805. The cultivated plant indicated by Pursh's "*v. v. in Hort.*", there is good evidence, is the common cultivated large-flowered sweet-scented plant above referred to. Whatever the Montana plant might prove to be, it is certain that the Oregon specimen is the Columbia form, and the cultivated plant being the Missouri form, Pursh's *Ribes aureum* is, therefore, a complex of the two.

Lindley in 1830§ distinguished the two forms, and named the

*Pursh, Fl. Am. Sept. 1: 164. 1814.

†Meehan, Proc. Acad. Nat. Sci. Phila. 1898:12-49. 1898.

‡Coues, Proc. Acad. Nat. Sci. Phila. 1898:291-315. 1898.

§Lindl. Trans. Hort. Soc. Lond. 7:242. 1830.

Columbia plant *Ribes tenuiflorum*, retaining the name *aureum* for the Missouri plant. Previous to this, however, Berlandier had divided Pursh's *Ribes aureum* into two species, *aureum* and *flavum*,* a treatment of the group in which he was followed by Colla†. There is, furthermore, a still earlier segregation of *Ribes aureum*, in the year 1816, in the Botanical Register, which takes precedence over the work of all these writers.

In the paper in question‡ *Ribes aureum* was treated by Ker as a species including both the Columbia plant and the Missouri plant, but the latter was made an unnamed variety of the former with the diagnosis "Foliis villosiusculis, pedunculis villosissimis." Following this diagnosis is the citation:

Ribes longiflorum. Fraser's cat. (1813). Ad specim. plura spontanea lecta ad Missouri fluvium à D. Nuttall et in Louisiana superiori à D. Bradbury in Herb. Dom. A. B. Lambert assertata.

In Fraser's Catalogue the name *Ribes longiflorum* is a nomen nudum, but in this paper by Ker, as shown above, a brief but correct diagnosis is given with a citation of type specimens and a type locality, and an excellent colored plate made from plants grown from Nuttall's imported seeds or cuttings. With reference to the type locality, it should be noted that Nuttall and Bradbury did not ascend the Missouri farther than the eastern part of Mercer County, North Dakota, and did not, therefore, meet with the Columbia plant.

It may be well to add, as a sort of postscript to this short paper, a suggestion regarding the making of supposed new species in the *aureum* group of *Ribes*, should the wide range and variable character of the group lead anyone to the publication of such species. The group is already supplied with an assortment of names amply sufficient for most nomenclatorial purposes and the availability of any of the supply on hand should be ascertained before any new name is added. The

*Berlandier, Mem. Soc. Phys. Geneve 32: 60. 1826.

†Colla, Mem. Accad. Torin 33: 114. 1826-9.

‡Ker, Bot. Reg. 2: t. 125. 1816.

names I have found published in the group, as either specific or varietal designations, or as hybrids, are as follows:

aureum	lindleyanum
beatonii	longiflorum
billiardii	loudoni
chrysococcum	lucidum
cinerascens	missuriense
coccineum	odoratum
ebracteatum	oregoni
flabellaris	palmatum
flavum	praecox
fontainesii	proximum
fragrans	revolutum
glabratum	sanguineum
gordonianum	serotinum
inodorum	tenuiflorum
intermedium	tubiflorum
jasminiflorum	vergens
leiobotrys	villosum

Ribes lentum.

In 1876 Dr. Asa Gray published* a variety *molle* of *Ribes lacustre*, giving it a range in the Sierra Nevada of California at 6,000 to 10,000 feet, from Mariposa County northward. Under this name the plant has usually passed. As now understood it is a species of wide distribution in the western United States and clearly distinct from *lacustre*. In the matter of names this little currant has been amply honored. In 1894 Professor A. J. McClatchie published a *Ribes nubigenum*† which he had collected at an elevation of 10,000 feet on the summit of Mount San Antonio, or "Baldy," on the line between Los Angeles and San Bernardino counties, southern California. Three years later, the name *nubigenum* proving to be a homonym, the name *montigenum* was substituted.‡ A careful examination of a duplicate type specimen indicates that this plant must be considered specifically identical with Dr. Gray's

*Gray, Bot. Cal. 1: 206. 1876.

†McClatchie, Erythea 2: 80. 1894, not Phil. 1856.

‡McClatchie, Erythea 5: 38. 1897.

lacustre molle. Meanwhile Mr. Marcus E. Jones, in 1895, had published* a *Ribes lacustre lentum* based on specimens collected at an elevation of about 10,000 feet in the Henry Mountains and on Belknap Peak, southern Utah. In publishing the variety the author called attention to the possible identity of *lentum* and *molle*, a point that could only be determined by an examination of the type specimens of the latter. This has now been done and shows the two to be the same.

My attention was recently called by Professor C. V. Piper to the fact that among the specimens referred by Gray to his *Ribes lacustre parvulum*† are some which belong in reality to *Ribes lacustre molle* Gray, and the suggestion was therefore made that the varietal name *parvulum* should be taken up as the specific name of the plant under discussion. In his original description Dr. Gray characterized his variety as with nearly glabrous leaves, smaller than those of the type form of *lacustre*, as occurring in "the Rocky Mountains and north to British Columbia," and as having been mistaken formerly for *Ribes setosum*. An examination of the material in the Harvard Herbarium shows that Dr. Gray named as *Ribes lacustre parvulum* six specimens which he had formerly determined as *setosum*, as follows:

"Rocky Mts. Hook. Dupl. Fl. Bor. Am. '*R. oxyacanthoides*.'"

"Hort. Cantab. Anno 1846 (178 Loddiges)."

"Isle St. Ignace, L. Superior."

Hall & Harbour's No. 184 of their Rocky Mountain Flora.

Parry's No. 149 of his Rocky Mountain Flora.

Watson's No. 376 of the King Survey, from the Uinta Mountains, Utah.

The first three of these are *lacustre*-like plants with smooth and small leaves, while the last three are *Ribes lentum*. We have therefore no definite fixation of the type in the original specimens. Turning to the customary treatment of *parvulum* in herbaria and published papers, we find that botanists have applied the name either to the small and smooth-leaved, black-fruited plant so frequent in the northern Rocky Mountains, or,

*Jones, Proc. Cal. Acad. II, 5: 681. 1895.

†Gray, Bot. Cal. 1: 206. 1876.

as did Dr. Gray, to both that plant and *lentum*. Dr. P. A. Rydberg in raising *parvulum* to specific rank* cited the original description of Gray and that of Professor Coulter's Manual, assigned to it a range "among rocks on the highest mountains [of Montana] at an altitude of about 3000 m.," and cited four specimens. A duplicate of one of these (Rydberg & Bessey No. 4251) is in the National Herbarium and this belongs to the smooth-leaved plant already mentioned. But another of the specimens cited by Dr. Rydberg (Tweedy No. 831) is clearly referable to *lentum*. It is evident therefore that the confusion of two plants under the name *parvulum* still continues, and in deciding which of them should be treated as the real *parvulum*, it seems proper to exclude the plant known as *lentum*. Therefore the first of the specimens in the Harvard University Herbarium cited above, collected in the Rocky Mountains of British America, is designated as the type of *Ribes lacustre parvulum* Gray.

The name of the species necessarily becomes **Ribes lentum** (Jones) Coville & Rose, for the varietal name *molle*, if raised to specific rank as has been done by Mr. Thomas Howell, † cannot be maintained, as it is a homonym of the earlier *Ribes molle* of Poeppig, 1858. It is believed that these are all the published names for the plant, although Professor Aven Nelson has recently distributed specimens with a herbarium name, the publication of which, after the establishment of the identity of his plant with *Ribes lentum*, has now been abandoned.

Ribes lentum is distinguished from *Ribes lacustre* by its smaller size, smaller leaves, shorter and fewer-flowered racemes and especially its pubescent and glandular-hairy foliage. To this must be added another important character noted by Dr. J. N. Rose in Wyoming in 1893, namely the color and taste of the fruit. In *Ribes lacustre* the mature fruit is dark purple or almost black, and to most persons nauseating; in *lentum* the berry is a bright red, and though rather dry is quite palatable, indeed Dr. Rose found it in common use for jam. The species has a wide distribution in the high mountains of the arid west; from Arizona and New Mexico northward in the Rocky Mountains through Colorado and Wyoming to Idaho, and westward

*Mem. N. Y. Bot. Gard. 1: 203. 1900.

†Howell, Fl. Northw. Am. 1: 209. |1898.

across Utah and Nevada through the arid eastern portions of California, Oregon, and Washington. It has also been collected in southern British Columbia. It occurs on the east slope of the Cascades in Washington, and again in California from the Sierra Nevada to the San Jacinto Mountains, but in Oregon it has not yet been found on the Cascade Mountains though it has been collected on Steen Mountain, the Warner Mountains, Gearhart Mountain, and the Paulina Mountains, all elevations in the plains of eastern Oregon and the last connected by a belt of timber with the Cascades, on the eastern slope of which the plant ought sometime to be found.